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Masahide Tanaka

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,269

Applicant(s)

TANAKA ET AL.

Examiner

Nelson D. Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 2, 2006 has been entered.

Response to Amendment

2. The Examiner acknowledges the amended claims filed on October 2, 2006. Claims 9, 11, 15 and 22 have been amended.

Specification

3. The Examiner acknowledges the new title filed on October 2, 2006. The title is acceptable.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 9, 10 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 7, 9-15, 17-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A in view of Berstis, US Patent 6,721,001 B1 and further in view of Takahashi, US Patent 6,580,460 B1.**

Regarding claim 1, Chatani discloses a digital image storage (Fig. 1) system comprising: a data storage (Fig. 1: 1) including a docking station (see fig. 1: 6) on which a digital camera (Fig. 1: 10) can be placed for transmitting images stored in a memory (Fig. 1: 8) of the digital camera to the docking station and for receiving electric power from the docking station to charge a battery (using battery charger in fig. 1: 9) of the digital camera, the data storage further including a storage medium (Fig. 1: 2) that stores the transmitted digital images; and a controller (control circuit in fig. 2: 23) that controls the transmission of the digital images (Fig. 3, step S102) from the digital camera and the charging of the digital camera battery (Fig. 3, step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Chatani does not explicitly disclose that the storage medium is disposed in a housing that is separate from a housing having the docking station and that the controller controls the transmission images and the charging camera battery so that the charging and the transmission do not occur at the same time.

However, Berstis teaches a discloses a digital image storage system comprising: a digital camera (Fig. 1: 102) having a memory (Fig. 2: 214) capable of storing digital images and a manually operable power switch (a power switch is inherently taught by Berstis; a data storage (Berstis teaches that the images are transmitted to a server or a computer system; col. 2, lines 40-46; col. 4, lines 53-63) having a storage medium (by teaching that the images are transmitted to a server or a computer system, Berstis inherently teaches a data storage having a storage medium for storing the digital images since a storage medium is necessitated to store the image data; col. 2, lines 40-46; col. 4, lines 53-63; a docking station (Fig. 1: 106) disposed on a housing separate from the housing where the storage medium is disposed (server or computer system) on which the digital camera can be placed to transmit the digital images stored in the memory of said camera to the storage medium in the data storage through said docking station; a controller (Fig. 2: 216) that controls the transmission of the digital images from the digital camera memory to the storage medium (Col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63). Having the storage medium disposed in a housing separate from the housing having the docking station is advantageous because it would allow the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

Therefore, taking the combined teaching of Chatani in view of Berstis as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention

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was made to modify Chatani by having the storage medium disposed in a housing that is separate from a housing having the docking station. The motivation to do so would have been to improve the digital image storage by allowing the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

The combined teaching of Chatani in view of Berstis fails to teach that the controller controls the transmission images and the charging camera battery so that the charging and the transmission do not occur at the same time.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, the camera comprising a power switch that switches the digital camera between an operative state and an inoperative state (Col. 12, line 63 – col. 13, line 36), wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn of its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25). Also in fig. 3, Takahashi also teaches the concept of start charging the battery of the camera after the transmission of images is stopped by teaching that after connecting the camera to the printer (step 301), the camera is set to receive power from the printer (step 305), then executing different operations can be performed (i.e. selects the image to be printed out, determines the output layout, sets the number of sheets to be output, performs processing such as color adjustment, index print, and the like, and

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prints out the selected image using the digital image sensing device 117 and printer 118) (see step 306), after the operations are performed the systems checks whether the no operations has been performed for a predetermined time or more (step 308), and if no operation has been performed the camera battery capacity is checked to determine whether the capacity is enough (step 309) if not enough charge is detected, the battery of the camera would be charged using electric power supplied from the printer (step 310) (Col. 13, lines 1-67). Automatically start charging the battery of the camera after the transmission of image data and other data is stopped is advantageous because is would help the digital camera to manage its power consumption during image capturing to have said camera ready for further image capturing and also it would help to minimize noises during transmission due to the charging of the battery of the camera.

Therefore, taking the combined teaching of Chatani in view of Berstis and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chatani and Berstis by controlling the transmission images and the charging camera battery so that the charging and the transmission do not occur at the same time. The motivation to do so would have been to manage the camera power consumption during image capturing so as to have said camera ready for further image capturing and also to minimize noises during transmission due to the operation of charging the battery of the camera.

Regarding claim 7, Chatani discloses that the docking station has an indicator (display shown in fig. 1: 3) that indicates information relevant to the charge to the battery (see translation, page 7, ¶ 0030).

Regarding claim 9, Chatani discloses a digital image storage system (Fig. 1) comprising: a digital camera (Fig. 1: 10) having a memory (Fig. 1: 8) capable of storing digital images; a data storage (Fig. 1: 1) including a docking station (Fig. 1: 6) on which the digital camera can be laid for transmitting the digital images of the digital camera memory to the docking station, a storage medium (Fig. 1: 2) that stores the digital images transmitted from the digital camera memory from the docking station; and a controller (control circuit in fig. 2: 23) that receives a signal from the docking station to receive the transmission of the digital images (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Chatani fails to teach that the storage medium is disposed in a housing that is separate from a housing having the docking station and a manually operable power switch that switches the digital camera between an operative state and an inoperative state and that after the digital images transmission is terminated, the controller automatically causes a switching of the digital camera from the operative state to the inoperative state without the manual operation of the power switch and that the controller automatically starts charging of a battery of the digital camera through the docking station after the transmission of the digital images is stopped.

However, Berstis teaches a discloses a digital image storage system comprising: a digital camera (Fig. 1: 102) having a memory (Fig. 2: 214) capable of storing digital images and a manually operable power switch (a power switch is inherently taught by Berstis; a data storage (Berstis teaches that the images are transmitted to a server or a computer system; col. 2, lines 40-46; col. 4, lines 53-63) having a storage medium (by

teaching that the images are transmitted to a server or a computer system, Berstis inherently teaches a data storage having a storage medium for storing the digital images since a storage medium is necessitated to store the image data; col. 2, lines 40-46; col. 4, lines 53-63; a docking station (Fig. 1: 106) disposed on a housing separate from the housing where the storage medium is disposed (server or computer system) on which the digital camera can be placed to transmit the digital images stored in the memory of said camera to the storage medium in the data storage through said docking station; a controller (Fig. 2: 216) that controls the transmission of the digital images from the digital camera memory to the storage medium (Col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63). Having the storage medium disposed in a housing separate from the housing having the docking station is advantageous because it would allow the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

Therefore, taking the combined teaching of Chatani in view of Berstis as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chatani by having the docking station transmitting the digital images from the digital camera to an external data storage that includes a housing that is separate from a housing having the docking station. The motivation to do so would have been to improve the digital image storage by allowing the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera

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connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

The combined teaching of Chatani in view of Berstis fails to teach a manually operable power switch that switches the digital camera between an operative state and an inoperative state and that after the digital images transmission is terminated, the controller automatically causes a switching of the digital camera from the operative state to the inoperative state without the manual operation of the power switch and that the controller automatically starts charging of a battery of the digital camera through the docking station after the transmission of the digital images is stopped.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, the camera comprising a power switch that switches the digital camera between an operative state and an inoperative state (Col. 12, line 63 – col. 13, line 36), wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn off its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25). Switching from an operative state to an inoperative state after transmitting the digital images is advantageous because it would to reduce the power consumption of the digital camera. Also in fig. 3, Takahashi also teaches the concept of start charging the battery of the camera after the transmission of images is stopped by teaching that after connecting the camera to the printer (step 301), the camera is set to receive power from the printer (step 305), then executing different operations can be

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performed (i.e. selects the image to be printed out, determines the output layout, sets the number of sheets to be output, performs processing such as color adjustment, index print, and the like, and prints out the selected image using the digital image sensing device 117 and printer 118) (see step 306), after the operations are performed the systems checks whether the no operations has been performed for a predetermined time or more (step 308), and if no operation has been performed the camera battery capacity is checked to determine whether the capacity is enough (step 309) if not enough charge is detected, the battery of the camera would be charged using electric power supplied from the printer (step 310) (Col. 13, lines 1-67). Automatically start charging the battery of the camera after the transmission of image data and other data is stopped is advantageous because is would help the digital camera to manage its power consumption during image capturing to have said camera ready for further image capturing and also it would help to minimize noises during transmission due to the charging of the battery of the camera.

Therefore, taking the combined teaching of Chatani in view of Berstis and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chatani and Berstis by switching the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images and to have the controller to automatically start charging of a battery of the digital camera through the docking station after the transmission of the digital images is stopped. The motivation to do so would have been to reduce the power consumption of the digital camera as suggested

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by Takahashi (Col. 14, lines 19-25) and to manage the camera power consumption during image capturing so as to have said camera ready for further image capturing and also to minimize noises during transmission due to the operation of charging the battery of the camera.

Regarding claim 10, Chatani discloses a system for use with digital images, comprising: a docking station (see fig. 1: 6) on which a digital camera (Fig. 1: 10) can be placed for transmitting digital images stored in a memory (Fig. 1: 8) of the digital camera to the docking station and for receiving electric power to charge a battery of the digital camera (using battery charger in fig. 1: 9) while the digital camera is placed on the docking station; and a controller (control circuit in fig. 2: 23) that controls the transmission of the digital images (Fig. 3, step S102) from the digital camera and the charging of the digital camera battery (Fig. 3, step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶ 0029).

Chatani does not explicitly disclose the docking station transmitting the digital images from the digital camera to an external data storage that includes a housing that is separate from a housing having the docking station and that the controller controls the transmission images and the charging camera battery so that the charging and the transmission do not occur at the same time.

However, Berstis teaches a discloses a digital image storage system comprising: a digital camera (Fig. 1: 102) having a memory (Fig. 2: 214) capable of storing digital images and a manually operable power switch (a power switch is inherently taught by Berstis; a data storage (Berstis teaches that the images are transmitted to a server or a

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computer system; col. 2, lines 40-46; col. 4, lines 53-63) having a storage medium (by teaching that the images are transmitted to a server or a computer system, Berstis inherently teaches a data storage having a storage medium for storing the digital images since a storage medium is necessitated to store the image data; col. 2, lines 40-46; col. 4, lines 53-63; a docking station (Fig. 1: 106) disposed on a housing separate from the housing where the storage medium is disposed (server or computer system) on which the digital camera can be placed to transmit the digital images stored in the memory of said camera to the storage medium in the data storage through said docking station; a controller (Fig. 2: 216) that controls the transmission of the digital images from the digital camera memory to the storage medium (Col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63). Having the storage medium disposed in a housing separate from the housing having the docking station is advantageous because it would allow the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

Therefore, taking the combined teaching of Chatani in view of Berstis as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chatani by having the docking station transmitting the digital images from the digital camera to an external data storage that includes a housing that is separate from a housing having the docking station. The motivation to do so would have been to improve the digital image storage by allowing the user to connect the

digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

The combined teaching of Chatani in view of Berstis fails to teach that the controller controls the transmission images and the charging camera battery so that the charging and the transmission do not occur at the same time.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, the camera comprising a power switch that switches the digital camera between an operative state and an inoperative state (Col. 12, line 63 – col. 13, line 36), wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn of its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25). Also in fig. 3, Takahashi also teaches the concept of start charging the battery of the camera after the transmission of images is stopped by teaching that after connecting the camera to the printer (step 301), the camera is set to receive power from the printer (step 305), then executing different operations can be performed (i.e. selects the image to be printed out, determines the output layout, sets the number of sheets to be output, performs processing such as color adjustment, index print, and the like, and prints out the selected image using the digital image sensing device 117 and printer 118) (see step 306), after the operations are performed the systems checks whether the no operations has been performed for a predetermined time or more (step 308), and if

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no operation has been performed the camera battery capacity is checked to determine whether the capacity is enough (step 309) if not enough charge is detected, the battery of the camera would be charged using electric power supplied from the printer (step 310) (Col. 13, lines 1-67). Automatically start charging the battery of the camera after the transmission of image data and other data is stopped is advantageous because it would help the digital camera to manage its power consumption during image capturing to have said camera ready for further image capturing and also it would help to minimize noises during transmission due to the charging of the battery of the camera.

Therefore, taking the combined teaching of Chatani in view of Berstis and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chatani and Berstis by controlling the transmission images and the charging camera battery so that the charging and the transmission do not occur at the same time. The motivation to do so would have been to manage the camera power consumption during image capturing so as to have said camera ready for further image capturing and also to minimize noises during transmission due to the operation of charging the battery of the camera.

Regarding claim 11, Chatani discloses a digital image storage system comprising: a digital camera (Fig. 1: 10) having a memory (Fig. 1: 8) capable of storing digital images; a docking station (Fig. 1: 6) on which a digital camera can be placed for transmitting the digital images of the digital camera memory to the docking station; a storage medium (Fig. 1: 2) that stores the digital images transmitted from the digital camera through the docking station; and a controller (control circuit in fig. 2: 23) that

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receives a signal from the docking station to receive the transmission of the digital images (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶ 0029)

Chatani fails to teach the docking station transmitting the digital images from the digital camera to an external data storage that includes a housing that is separate from a housing having the docking station and a manually operable power switch that switches the digital camera between an operative state and an inoperative state and that after the digital images transmission is terminated, the controller automatically causes a switching of the digital camera from the operative state to the inoperative state without the manual operation of the power switch and that the controller automatically starts charging of a battery of the digital camera through the docking station after the transmission of the digital images is stopped.

However, Berstis teaches a discloses a digital image storage system comprising: a digital camera (Fig. 1: 102) having a memory (Fig. 2: 214) capable of storing digital images and a manually operable power switch (a power switch is inherently taught by Berstis; a data storage (Berstis teaches that the images are transmitted to a server or a computer system; col. 2, lines 40-46; col. 4, lines 53-63) having a storage medium (by teaching that the images are transmitted to a server or a computer system, Berstis inherently teaches a data storage having a storage medium for storing the digital images since a storage medium is necessitated to store the image data; col. 2, lines 40-46; col. 4, lines 53-63; a docking station (Fig. 1: 106) disposed on a housing separate from the housing where the storage medium is disposed (server or computer system) on which the digital camera can be placed to transmit the digital images stored in the

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memory of said camera to the storage medium in the data storage through said docking station; a controller (Fig. 2: 216) that controls the transmission of the digital images from the digital camera memory to the storage medium (Col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63). Having the storage medium disposed in a housing separate from the housing having the docking station is advantageous because it would allow the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

Therefore, taking the combined teaching of Chatani in view of Berstis as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chatani by having the docking station transmitting the digital images from the digital camera to an external data storage that includes a housing that is separate from a housing having the docking station. The motivation to do so would have been to improve the digital image storage by allowing the user to connect the digital camera to different data storages (i.e. pc, laptops, PDA's, etc), using the camera connected to the docking station as an external device that can be placed closer to the user for easy access offering the necessary support to secure the camera in place, reducing the amount of parts and costs of the data storage.

The combined teaching of Chatani in view of Berstis fails to teach a manually operable power switch that switches the digital camera between an operative state and an inoperative state and that after the digital images transmission is terminated, the

controller automatically causes a switching of the digital camera from the operative state to the inoperative state without the manual operation of the power switch and that the controller automatically starts charging of a battery of the digital camera through the docking station after the transmission of the digital images is stopped.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, the camera comprising a power switch that switches the digital camera between an operative state and an inoperative state (Col. 12, line 63 – col. 13, line 36), wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn off its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25). Switching from an operative state to an inoperative state after transmitting the digital images is advantageous because it would to reduce the power consumption of the digital camera. Also in fig. 3, Takahashi also teaches the concept of start charging the battery of the camera after the transmission of images is stopped by teaching that after connecting the camera to the printer (step 301), the camera is set to receive power from the printer (step 305), then executing different operations can be performed (i.e. selects the image to be printed out, determines the output layout, sets the number of sheets to be output, performs processing such as color adjustment, index print, and the like, and prints out the selected image using the digital image sensing device 117 and printer 118) (see step 306), after the operations are performed the systems checks whether the no operations has been performed for a predetermined time or more (step 308), and if no operation has been performed the camera battery

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capacity is checked to determine whether the capacity is enough (step 309) if not enough charge is detected, the battery of the camera would be charged using electric power supplied from the printer (step 310) (Col. 13, lines 1-67). Automatically start charging the battery of the camera after the transmission of image data and other data is stopped is advantageous because it would help the digital camera to manage its power consumption during image capturing to have said camera ready for further image capturing and also it would help to minimize noises during transmission due to the charging of the battery of the camera.

Therefore, taking the combined teaching of Chatani in view of Berstis and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera in Chatani and Berstis by switching the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images and to have the controller to automatically start charging of a battery of the digital camera through the docking station after the transmission of the digital images is stopped. The motivation to do so would have been to reduce the power consumption of the digital camera as suggested by Takahashi (Col. 14, lines 19-25) and to manage the camera power consumption during image capturing so as to have said camera ready for further image capturing and also to minimize noises during transmission due to the operation of charging the battery of the camera.

Regarding claim 12, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 1 teaches that the controller controls the

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transmission of the digital images and the charging of the battery so that the charging of the battery is started after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 1 apply here.

Regarding claim 13, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 1 teaches that the controller automatically starts the charging of the battery after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 1 apply here.

Regarding claim 14, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 1 teaches that the controller starts the charging of the battery after a predetermined period of time has passed after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 1 apply here.

Regarding claim 15, Chatani discloses a detector that detects a signal to start the transmission of the digital images (See translation, page 6, ¶ 0023 – page 7, ¶ 0030).

Regarding claim 17, Chatani discloses a digital camera (Fig. 1: 10) having a battery and a memory (Fig. 1: 8) capable of storing digital images (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶ 0029).

Regarding claim 18, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 10 teaches a storage medium (See

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Chatani, fig. 1: 2) that stores the transmitted digital images from the digital camera memory through the docking station (See Chatani translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029), the storage medium is disposed in the external data storage (See Berstis, col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63). Grounds for rejecting claim 10 apply here.

Regarding claim 19, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 10 teaches that the controller controls the transmission of the digital images and the charging of the battery so that the charging of the battery is started after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 10 apply here.

Regarding claim 20, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 10 teaches that the controller automatically starts the charging of the battery after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 10 apply here.

Regarding claim 21, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 10 teaches that the controller starts the charging of the battery after a predetermined period of time has passed after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 10 apply here.

Regarding claim 22, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 10 teaches that the controller automatically starts the charging of the battery after the transmission of the digital images is stopped (See Takahashi, fig. 3, steps 1-10; col. 13, lines 1-67). Grounds for rejecting claim 10 apply here.

Regarding claim 24, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 1 teaches the housing having the docking station does not include any memory for storing the digital images (See Berstis Fig. 1; col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63).

Regarding claim 25, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 9 teaches the housing having the docking station does not include any memory for storing the digital images (See Berstis Fig. 1; col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63).

Regarding claim 26, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 10 teaches the housing having the docking station does not include any memory for storing the digital images (See Berstis Fig. 1; col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63).

Regarding claim 27, the combined teaching of Chatani in view of Berstis and further in view of Takahashi as applied to claim 11 teaches the housing having the docking station does not include any memory for storing the digital images (See Berstis Fig. 1; col. 1, lines 45-50; col. 2, line 15 – col. 3, line 8; col. 4, lines 29-63).

7. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A and Berstis, US Patent 6,721,001 B1 in view of Takahashi, US Patent 6,580,460 B1 and further in view of Dowe, US Patent 5,602,458.

Regarding claim 2, the combined teaching of Chatani in view of Berstis and further in view of Takahashi fails to teach that the digital camera including a manually operable power switch that switches the digital camera between an operative state and an inoperative state.

However, Dowe teaches a camera (Fig. 3: 110) comprising a power switch (Fig. 1: 16) that switches the digital camera between an operative state and an inoperative state (Col. 2, line 65 – col. 3, line 14). It is advantageous to have the camera comprising a power switch, so the camera can be turn off when is not needed to pickup images in order to increase the battery life of said camera.

Therefore, taking the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Dowe as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera taught in Chatani, Berstis and Takahashi by having a power switch that switches the digital camera between an operative state and an inoperative state. The motivation to do so would have been to improve the digital camera by increasing the battery life of said camera.

Regarding claim 3, the combined teaching of Chatani in view of Berstis and further in view of Takahashi fails to teach that the controller starts the charging of the

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digital camera battery regardless of the manual operation of the digital camera power switch between the operative state and the inoperative state.

However, Dowe teaches a camera (Fig. 3: 110) comprising a power switch (Fig. 1: 16) that switches the digital camera between an operative state and an inoperative state (Col. 2, line 65 – col. 3, line 14), said camera is connected to a charging cradle (Fig. 3: 112) in order to recharge the battery in said camera, wherein, when said camera is connected to said charging cradle, the charging cradle proceeds to charge the battery of said camera, regardless of the status of the power switch of said camera (Col. 2, lines 29-46; col. 3, lines 32-56; col. 4, lines 26-37; col. 5, lines 9-37). Charging of the digital camera battery regardless of the manual operation of the digital camera power switch is advantageous because would allow the camera to recharge the battery even if the camera power switch is mistakenly left in an on condition, ensuring that the battery will be recharged and ready for use.

Therefore, taking the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Dowe as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera in Chatani, Berstis and Takahashi by charging of the digital camera battery regardless of the manual operation of the digital camera power switch between the operative state and the inoperative state. The motivation to do so would have been to recharge the battery even if the camera power switch is mistakenly left in an on condition, ensuring that the battery will be recharged and ready for use as suggested by Dowe (Col. 2, lines 39-46).

Regarding claim 4, limitations can be found in claim 2.

Regarding claim 5, the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Dowe as applied to claim 4 teaches that the controller causes the digital camera to be switched from the operative state to the inoperative state before the controller causes the digital camera battery to be charged (See Dowe, col. 2, lines 29-46; col. 3, lines 31-56; col. 5, lines 9-28).

Regarding claim 6, the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Dowe as applied to claim 2 teaches that the controller switches the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images (Takahashi teaches that when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn off its power supply in order to reduce consumption of power; col. 3, lines 29-42; col. 14, lines 19-25). Grounds for rejecting claim 2 apply here.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A and Berstis, US Patent 6,721,001 B1 in view of Takahashi, US Patent 6,580,460 B1 and further in view of Ramsier, US Patent 5,844,400.

Regarding claim 8, the combined teaching of Chatani in view of Berstis and further in view of Takahashi fails to teach a battery detector that detects a kind of battery within the digital camera.

However, detecting a kind of battery of an electronic device connected to a docking station is notoriously well known in the art as taught by Ramsier, who teaches a mobile terminal (Fig. 2: 10) is connectable to a cradle (Fig. 2: 90), wherein said cradle comprises a processor (Fig. 4: 200), which is able to discriminate among different battery types being used in the mobile terminal when said mobile terminal is connected to said cradle, the cradle determines the type of battery (Col. 2, lines 8-52; col. 5, lines 36-65; col. 7, line 47 – col. 8, line 11; col. 8, lines 25-62). Although the electronic device in Ramsier is a mobile telephone and not a camera, Ramsier teaches that the concept may be applied to any other electronic portable device, which employs rechargeable batteries (Col. 4, lines 15-38). Detecting the type of battery of the electronic device connected to the docking station is advantageous because it would increase the versatility in the use various types of batteries in the camera since one battery charger may be employed to charge the various typed of batteries that may be used.

Therefore, taking the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Ramsier as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the docking station in Chatani, Berstis and Takahashi to discriminate a kind of battery being used in the camera. The motivation to do so would have been to increase the versatility in the use various types of batteries in the camera since one battery charger may be employed to charge the various typed of batteries that may be used as suggested by Ramsier (Col. 2, lines 8-21).

9. Claims 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A and Berstis, US Patent 6,721,001 in view of Takahashi, US Patent 6,580,460 B1 and further in view of Asakawa, US Patent 6,135,809.

Regarding claim 16, the combined teaching of Chatani in view of Berstis and further in view of Takahashi fails to teach that the detector includes a mechanical contact and a sensor.

However, using a mechanical connector and a sensor for detecting the connection of an electronic device to another is well known in the art as taught by Asakawa. Asakawa teaches a card connector (Figs. 3 and 5A-5C) having electrical contacts (Fig. 3, items 20 and 52) forming electrical connections with a memory card (Figs. 5A-5C, item C) inserted therein and detecting or sensing unit including a set of sensing members connected to a detecting circuit indicating the state when the card is fully inserted into the connector, and one of the sensing members (Fig. 3, items 20-20c, 52 and 54) has a bend that exerts pressure on one surface of the card in a perpendicular direction relative to the one surface and closes or opens the detecting circuit (See figs. 3 and 5; col. 1, lines 57-65; col. 2, line 59 – col. 3, line 39). Having the detector including a mechanical contact and a sensor is advantageous because it would help determining whether the camera is properly connected to the image storage, providing reliable electrical connection between the devices.

Therefore, taking the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Asakawa as a whole, it would have been obvious to

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one of ordinary skilled in the art at the time the invention was made to modify the connection means in Chatani, Berstis and Takahashi by including sensing members connected to the detecting circuit to determine if the connection means for connecting the camera and the image storage is fully inserted. The motivation to do so would have been so would help the image storage to determine whether the camera is properly connected to the image storage, providing reliable electrical connection between the devices as suggested in Asakawa (Col. 1, lines 46-51).

Regarding claim 23, the combined teaching of Chatani in view of Berstis and further in view of Takahashi fails to teach that the detector includes a mechanical contact and a sensor.

However, using a mechanical connector and a sensor for detecting the connection of an electronic device to another is well known in the art as taught by Asakawa. Asakawa teaches a card connector (Figs. 3 and 5A-5C) having electrical contacts (Fig. 3, items 20 and 52) forming electrical connections with a memory card (Figs. 5A-5C, item C) inserted therein and detecting or sensing unit including a set of sensing members connected to a detecting circuit indicating the state when the card is fully inserted into the connector, and one of the sensing members (Fig. 3, items 20-20c, 52 and 54) has a bend that exerts pressure on one surface of the card in a perpendicular direction relative to the one surface and closes or opens the detecting circuit (See figs. 3 and 5; col. 1, lines 57-65; col. 2, line 59 – col. 3, line 39). Having the detector including a mechanical contact and a sensor is advantageous because it would

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help determining whether the camera is properly connected to the image storage, providing reliable electrical connection between the devices.

Therefore, taking the combined teaching of Chatani and Berstis in view of Takahashi and further in view of Asakawa as a whole, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the connection means in Chatani, Berstis and Takahashi by including sensing members connected to the detecting circuit to determine if the connection means for connecting the camera and the image storage is fully inserted. The motivation to do so would have been so would help the image storage to determine whether the camera is properly connected to the image storage, providing reliable electrical connection between the devices as suggested in Asakawa (Col. 1, lines 46-51).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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